Remarks

Premature Final Rejection

The Office Action issued on May 22, 2006 was made final and such action was premature. In the final Office Action the Examiner introduces a new ground of rejection that was neither necessitated by Applicant's amendment of the claims nor based on information submitted in an information disclosure statement (IDS). See MPEP 706.07(a). Applicants did not amend the claims, nor were any of the references cited in the final rejection submitted in an IDS by Applicants.

Moreover, MPEP 706.07(a) specifically addresses the current situation and prohibits final rejections in such instances. "When applying any 35 U.S.C. 102(e)/103 references against the claims of an application the examiner should anticipate that a statement averring common ownership at the time the invention was made may disqualify any patent or application applied in a rejection under 35 U.S.C. 103 based on 35 U.S.C. 102(e). **If such a statement is filed in reply to the 35 U.S.C. 102(e)/103 rejection and the claims are not amended, the examiner may not make the next Office action final if a new rejection is made**."

The previous Office action, which was mailed on February 21, 2006, was a rejection under 35 U.S.C. 103 based on 35 U.S.C. 102(e). US 2004/0246571 (Bonaventura) qualified as prior art under 35 U.S.C. 102(e) and was disqualified using a statement of common ownership in the Request for Reconsideration that was filed on April 21, 2006. The situation described in MPEP 706.07(a), which prohibits final rejections, is just the situation that has occurred here: 1) previous rejection was a 103 rejection using a 102(e) reference; 2) statement of common ownership was filed in subsequent response 3) claims were not amended in that response; 4) new rejection is made in subsequent action. Therefore, the finality of the previous Office action was premature and prosecution should still remain open.

The Rejection of Claims 12-15 under 35 U.S.C. § 102(b)

Claims 12-15 were rejected under 35 U.S.C. § 102(b) as anticipated by U.S. 4,616,517 (Esmay). Applicants respectfully traverse the rejection and request reconsideration for the following reasons.

Claim 12 recites a microscope with a fine focus adjustment means comprising: 1) a first focus adjustment knob 2) a removable focus adjustment knob 3) where both knobs 1 and 2 are **coaxial** and **independently rotatable** with respect to one another.

Esmay fails to teach a microscope with such an adjustment means. Knob 16 is frictionally mounted to the support 12 which prevents knob 16 from rotating when knob 20 is rotated. See col. 4, lines 15-25). Therefore, knobs 16 and 20 are not independently rotatable. Independent rotation would enable both knobs to be rotated simultaneously or individually, and Esmay explicitly indicates that such independent rotation is not possible, it is prevented.

Therefore, all the limitations of Claim 12 have not been taught by Esmay and Claim 12 is novel. Claims 13-15 are dependent on allowable independent Claim 12 and consequently are novel as well. Applicants respectfully request that the rejection of Claims 12-15 be withdrawn.

Claim 15

Although Claim 15 has been argued to be novel based on it dependency upon allowable Claim 12, Applicants further argue that the subject matter of Claim 15 is novel due to its recitation of a first means to prevent separating movement in the axial direction, and a second means to allow rotation, i.e., **two** separate means to removably attach. Esmay does indicate that a set screw can be used to secure knob 20 to shaft 22, but there is no additional means described, i.e., no second means to allow rotation. **Claim 15** recites **two** means, **a first for preventing axial movement** and a **second to allow rotation**. Assuming *arguendo* that Esmay teaches a first means similar to that recited in Claim 15, it fails to recite a second means that allows rotation. Therefore, all the limitations of Claim 15 (no teaching for a second means to allow rotation) have not been taught by Esmay and therefore Claim 15 is novel.

The Rejection of Claims 1-3, 5-7, 9-11 and 16-19 under 35 U.S.C. § 103(a)

Claims 1-3, 5-7, 9-11 and 16-19 were rejected under 35 U.S.C. §103(a) as unpatentable over U.S. 4,616,517 (Esmay) in view of U.S. 4,158,216 (Bigelow). Applicants respectfully traverse the rejection and request reconsideration for the following reasons.

Claims 1-3

The combination of Esmay and Bigelow was cited as the grounds for rejecting Claims 1-3. Specifically, Esmay was brought in to teach a microscope with a removable interchangeable focus adjustment knob fastenable to a focus adjustment means. Bigelow was cited as a reference teaching a magnetic attachment means. Missing, however, from Esmay and Bigelow is any teaching or disclosure of a removable knob that is **interchangeable**. This term, **interchangeable**, is a claim limitation that is not discussed in the Office action or Esmay and this oversight is significant. Interchangeable and removable attachment of the adjustment knob to the focus adjustment means is the reason that the claimed invention can be adaptable to left or right-handed users. Without a knob that is both removable and interchangeable a user would be unable to switch the focus adjustment knob from one side of the microscope to the other. Not only does Esmay fail to teach this limitation, Bigelow fails to as well, and as a result the combination of those two references fails to teach or suggest all the claim limitations of Claim 1.

Furthermore, in order to establish a *prima facie* case of obviousness there must be suggestion or motivation to combine the cited references. The rationale to combine references can be improper if the modification renders the prior art unsatisfactory or the motivation to combine is grounded in hindsight reconstruction. The primary reference is a monoaxial course-fine adjusting apparatus for a microscope that is uses direct attachment of the knob to a shaft in order to effect focus adjustment. Removing the direct attachment means would cause the focus adjustment means to not function. Any modification of the attachment means taught in Esmay to the use of a magnetic fastening means would require more than just a simple modification of the existing adjustment knob and adjustment means. A total change of the adjustment means and the adjustment knob would be required, which is strong evidence that the Examiner has used hindsight reconstruction to combine Esmay and Bigelow. While it may have been obvious to try

to create a removable interchangeable focus adjustment knob that is magnetically fastenable to a focus adjustment means in view of Esmay and Bigelow, but obvious to try is not the standard for a §103 rejection.

Additional evidence of the incorrectness of the combination of Esmay and Bigelow is supported by the fact that the Bigelow reference is from a non-analogous art. An analogous art is any reference that either is within the field of the inventor's endeavor or reasonably pertinent to the particular problem with which the inventor was involved. The inventor's field of endeavor in the case at hand relates to microscopes with removable and interchangeable adjustment systems. Bigelow is certainly not in Applicants' field of endeavor.

Bigelow is also not reasonably pertinent to the particular problem sought to be answered by Applicants claimed invention. Bigelow teaches a capacitive touch control that is a knob attached to a panel using magnets. While Bigelow does teach a knob that is magnetically fastened, but the knob does not rotate anything other than the knob, it is attached to a non-moving panel and is used to enter data, not move a shaft. The magnetic attachment needed to move a shaft is an entirely different problem than that addressed in Bigelow. Bigelow had no interest in creating a magnetic attachment that could move an adjustment means and still allow the knob to be removable. The interaction between the adjustment knob and the focus adjustments means in Claim 1 is sophisticated attachment that requirements sufficient magnetic strength, size, and positioning to enable the magnetically fastened knob to adjust focus by turning a focus drive means, while still allowing the knob to be removable. Bigelow teaches a magnetic interaction that requires no specific magnetic parameters, or requirements on the attachment. The simple interaction between the magnetic surface and knob in Bigelow does not teach or suggest a solution to the problem faced by an inventor seeking to develop a magnetic fastened focus adjusting knob that needs to not only attach the know to adjusting means, but do so in a manner that enables the focus adjusting knob to rotate an adjustment shaft and still allow detachability.

Therefore, a *prima facie* case of obviousness has not been made out and Claim 1 is non-obvious. Claims 2-3, which are dependent on Claim 1, are also non-obvious due to the

dependency on Claim 1 and Applicants request that the rejection of Claims 1-3 be withdrawn and those claims passed to allowance.

Claims 5-7 and 9-11

Similar to Claim 1, Claim 5 recites a focus adjustment means with a removable **interchangeable** focus adjustment knob. Claim 5 is non-obvious in light of the combination Esmay and Bigelow for reasons similar to the non-obviousness of Claim 1, i.e., the combination of Esmay and Bigelow fails to teach or suggest a removable and **interchangeable** focus adjustment knob. Nothing in Bigelow or Esmay speaks of interchangeability, they either teach a conventional focus adjusting knob that is possibly removable but only attachable on a single side, or a magnetic attachment of a non-microscope knob to a panel. Therefore, a *prima facie* case of obviousness has not been made out and Claim 5 is non-obvious. Claims 6, 7 and 9-11, which are dependent on Claim 5, are also non-obvious due to the dependency on Claim 5 and Applicants request that the rejection of Claims 5-7 and 9-11 be withdrawn and those claims passed to allowance.

Claim 16

The arguments above relating to the improper combination of Esmay with Bigelow apply equally to the patentability of Claim 16 and are not repeated to avoid being redundant. Furthermore, Claim 16 is non-obvious since it has been shown in the arguments for the novelty of Claims 12-15 that Esmay fails to teach two knobs that are independently rotatable. Consequently, since Claim 16 is dependent on Claim 12 it recites limitations that are not taught or suggested by the combination of Esmay and Bigelow. Therefore, Claim 16 is non-obvious.

Claim 17-19

The Examiner has compared bore 113 to a pin receiving means complementarily extending axially of the focus drive means. However, Esmay and Bigelow, or the combination of the two references, fails to teach or suggest a **pin means extending axially of the removable focus adjustment knob**. Esmay may have a bore 113 through knob 20, but there is no pin means taught or disclosed. Also, the bore, which is being compared to a pin receiving means, is in the knob. However, the limitation in Claim 17 recites that the pin receiving means extends axially

from the focus drive means, i.e., the pin receiving means is in the drive means. That limitation is not taught by Esmay or Bigelow. Therefore Claim 17 is unobvious since all the limitations of that claim, namely the pin means extending from the removable focus adjustment knob and pin receiving means extending axially from a focus drive means, are not taught or suggested by the combination. Claims 18 and 19 are dependent on Claim 17 and thus are patentable over the combination of Esmay and Bigelow because Claim 17 is patentable over that combination. Furthermore, the combination of Esmay and Bigelow fail to teach or suggest a pin means extending axially of the focus adjusting knob, and pin receiving means extending axially of said the focus drive means, that are magnetic, as recited in Claim 18.

The Rejection of Claims 20 and 21 under 35 U.S.C. § 103(a)

Claims 20 and 21 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. 4,616,517 (*Esmay*) in view of U.S. 4,158,216 (Bigelow), and in further view of U.S. 5,684,627 (Ganser). Applicants respectfully traverse the rejection and request reconsideration for the following reasons.

The rejection of Claims 20 and 21 in view of the combination of Esmay, Bigelow and Ganser is a quintessential hindsight reconstruction rejection. The Examiner can not pick and choose the elements from various references using Applicants' disclosure as a roadmap for the reconstruction, but that is just what has occurred here. Using a primary reference that teaches a monoaxial adjustment system for a microscope (Esmay) the Examiner has sought out other references that teach elements recited in Claims 20-21 in an effort to build an obviousness rejection. A person of ordinary skill in the art would not have garnered the necessary information needed to create the focus adjusting means recited in Claims 20-21 by examining the disclosures from Esmay, Bigelow and Ganser. Rather, there is something more needed, an inventive step that required a reformulation of the adjustment means taught by Esmay. Esmay will not allow a removable adjustment knob to be attached on either side of the microscope is spite of the indication from Ganser that an adjustment means on either side would be possible. The suggestion in Ganser is that existing or conventional focusing knobs could be attached in that

way, but prior to Applicants disclosure removable knobs that are magnetically attached were not conventional or even fathomed. The Examiner has used Applicants disclosure as a road map and has determined that because it is easy to follow a blazed trail, that it is easy to make one. The fact that previous microscopes did not address the problem of supplying a single microscope that could be adapted for right and left hand microscopists using magnetically attached focus adjustment knobs, is strong support for the ingenuity and non-obviousness of the microscope recited in Claims 20-21. Therefore, a prima facie case of obviousness has not been born out by the Examiner and Claims 20-21 are non-obvious.

Claim 21

The Examiner indicates that prior art fails to teach the limitations of Claim 21 reciting an axial length of one focus knob being longer than the other. This size difference is described by the Examiner as a modification that is a mere change in size of a component that supplies no substantial advantage. However, the difference in axial length provides clearance to fit upon the same side as a stage drive mechanism 26, "so that adjustment of the microscope stage in the x, y and z directions, and more particularly, fine focal adjustment, may be accomplished on the same side of the microscope." (See paragraph [0038]). The decision to have one knob with an axial length greater than another was not a mere obvious change in size of a component with no substantial advantage, but it is a change that was invented to provide the option of controlling the microscope stage and fine focus adjustment from the same side of the microscope. Therefore, Claim 21 is patentable over the combination of Esmay, Bigelow and Ganser due to the failure of that combination to teach or suggest all the limitations recited in that claim.

The Rejection of Claims 22, 24, 26-28, 30 and 32 under 35 U.S.C. § 103(a)

Claims 22, 24, 26-28, 30 and 32 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. 4,616,517 (*Esmay*) in view of U.S. 5,684,627 (Ganser). Applicants respectfully traverse the rejection and request reconsideration for the following reasons.

The combination of Esmay and Ganser fail to teach all the claim limitations recited in Claim 22. Esmay has been cited as teaching a focusing means comprising a removable

adjustment knob and a focus adjustment means. Ganser is cited as teaching the advantage of placing duplicate focus adjustment means on opposite sides of a microscope. Missing from both references is the limitation in Claim 22 for **removable focus adjustment knobs that are releasably and alternatively fastenable to either the first of second focus drive means**. The knobs taught in Esmay are only associated with a single drive means. Knob 16 is fastened to shaft 18 and knob 20 is attached to shaft 22. There is no indication in Esmay that the knobs can be **alternatively fastenable to either the first of second focus drive means.** Ganser fails to mend the inadequacies of Esmay. Therefore, the combination of Esmay and Ganser fails to recite a first and a second focus adjustment knob releasably and alternatively fastenable to either the first and second focus drive means. Ganser in col. 3 , lines 65-66 suggests that it may be possible to arrange an additional adjustment knob on the other side of the microscope in a manner analogous to known coaxial focusing knobs of conventional microscopes. There is no teaching or suggestion that the knobs are releasably and alternatively fastenable to each of the first and second focus drive means. Esmay and Ganser individually and in combination fail to teach or suggest such an arrangement. Ganser teaches the use of techniques and parts associated with **known** focusing knobs and **conventional** microscopes. **Knobs that are releasable and alternatively fastenable** to either a first or second drive means are not known or related to conventional microscopes, and were not known until the disclosure from Applicants elucidated the invention. Esmay is also devoid of any teaching that the knobs are releasable and alternatively fastenable. Therefore an element of Claim 22 is not taught or suggested by either Esmay or Bigelow.

The Examiner indicates that because Esmay teaches a releasable knob and Ganser teaches connection of knobs on either side, the two combined teach the adjusting knob taught in Claim 22. However, the modification of Esmay that would be required on the focus adjustment knobs taught in that reference would be substantial to construct a system with interchangeability of the knobs. Nothing in Ganser or Esmay speaks of interchangeability, or alternatively attaching the knobs to two different drive means. Ganser and Esmay either teach a conventional knob on either side, or a knob that is possibly removable but only attachable on a single drive means.

As it was previously argued for Claim 21, the combination of Esmay and Ganser also fails to teach a focus adjustment means with one removable focus adjustment knob with a greater axial length than the other. Those arguments *supra* apply equally to this analogous limitation in Claim 22. Therefore, the combination of Esmay and Ganser fail to teach or suggest multiple claim limitations recited in Claim 22. Therefore, a *prima facie* case of obviousness has not been supplied for Claim 22, and all claims dependent on that claim. Applicants respectfully submit that Claim 22-26 are patentable and request withdrawal of the rejection of those claims.

Claim 24 and 30

Esmay is cited as teaching the pin means extending axially of the removable focus adjustment knob and pin receiving means complementarily extending axially of the focus drive means. As argued previously for Claim 17, Esmay does not teach a pin means extending axially of the removable focus adjustment knob or a complementary pin receiving means. For brevity the arguments are not repeated, but suffice it to say that Esmay does not teach such pin means and neither does Ganser. Therefore, the combination fails to establish a *prima facie* case of obviousness for Claim 24 and 30 and those claims are patentable.

Claim 27-32

Esmay is cited as teaching a focus means comprising a first coarse and removable focus adjustment knobs and a drive means, and Ganser is cited as teaching the placement of duplicate focus adjustment means on opposite sides of a microscope. The combination, therefore, is determined to be obvious. However, Ganser col. 3, lines 65-66 suggests that it may be possible to arrange an additional adjustment knob on the other side of the microscope in a manner analogous to known coaxial focusing knobs of conventional microscopes. There is no teaching or suggestion that the knobs are releasably and alternatively fastenable to each of the first and second focus drive means in either Esmay or Ganser. Therefore, Esmay and Ganser individually and in combination fail to teach or suggest such an arrangement. Ganser teaches the use of techniques and parts associated with **known** focusing knobs and **conventional** microscopes. However, **knobs that are releasable and alternatively fastenable** to either a first or second drive means are not known or related to conventional microscopes, and were not known until the

disclosure of Applicants elucidated that invention. Esmay is also devoid of any teaching that the knobs are releasable and alternatively fastenable. Therefore, elements of Claim 27 are not taught or suggested by either Esmay or Bigelow.

The Examiner indicates that because Esmay teaches a releasable knob and Ganser teaches connection of knobs on either side, the two combined teach the adjusting knob taught in Claim 27. However, the modification of Esmay that would be required on the focus adjustment knobs taught in that reference would be substantial to construct a system with interchangeability of the knobs. Nothing in Ganser or Esmay speaks of interchangeability, they either teach a conventional knob on either side, or a knob that is possibly removable but only attachable on a single side.

For all the reasons above Claim 27 is non-obvious. Claim 28 is non-obvious because of its dependency on Claim 27, and because it recites elements untaught by the combination of Esmay and Ganser. Specifically, one adjustment knob that has a greater axial length than the other (see arguments *supra* regarding Claim 21).Furthermore, Claims 29-32 are also non-obvious due there dependency on allowable Claim 27.

The Rejection of Claims 23, 25, 29 and 31 under 35 U.S.C. § 103(a)

Claims 23, 25, 29 and 31 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. 4,616,517 (*Esmay*) in view of U.S. 5,684,627 (Ganser), and in further view of U.S. 4,158,216 (Bigelow). Applicants respectfully traverse the rejection and request reconsideration for the following reasons.

Claims 23 is patentable over the combination of Esmay, Ganser and Bigelow because that combination fails to teach or suggest all the elements recited in Claim 23. Specifically, Ganser in col. 3 , lines 65-66 suggests that it may be possible to arrange an additional adjustment knob on the other side of the microscope in a manner analogous to known coaxial focusing knobs of conventional microscopes. However, there is no teaching or suggestion that the knobs are releasably and alternatively fastenable to each of the first and second focus drive means. Esmay, Ganser and Bigelow individually and in combination fail to teach or suggest such an

arrangement. Ganser teaches the use of techniques and parts associated with **known** focusing knobs and **conventional** microscopes. However, **knobs that are releasable and alternatively fastenable** to either a first or second drive means were not known or related to conventional microscopes until Applicants' disclosure. Esmay and Bigelow are also devoid of any teaching of focus adjustment knobs that are releasable and alternatively fastenable. Therefore, all the limitations of Claim 23 are not taught or suggested by the combination of Esmay, Ganser and Bigelow, and a *prima facie* case of obviousness has not been made out.

The Examiner indicates that because Esmay teaches a releasable knob, and Ganser teaches connection of knobs on either side, the logical conclusion is that the two combined teach the adjusting knob taught in Claim 23. However, the modification of Esmay that would be required on the focus adjustment knobs taught in that reference would be substantial to construct an adjustment system with knobs that are releasably and alternatively fastenable to either a first or second focus drive means, i.e., interchangeability of the knobs. Nothing in Esmay, Ganser, or Bigelow individually or in combination teaches or suggests this type of focus adjustment system. They either teach a conventional knob on either side, or a knob that is possibly removable, but not releasable and alternative attachment of a focus adjustment knob.

Since elements of Claim 23 are not taught or suggested by the combination of Esmay, Ganser and Bigelow, a *prima facie* case of obviousness has not been established for Claim 23. Therefore, Claim 23 and all claims dependant therefrom are patentable over Esmay, Ganser and Bigelow.

Claim 25

The combination of Esmay, Ganser and Bigelow fail to teach all the limitation of Claim 25. For example, Claim 25 recites that magnetic pin means and pin receiving means extending axially of each of said first and second focus adjustment means and the first and second drive means are used to attach the a first and second removable focus adjustment means to the first and second drive means. The pin means and pin receiving means have been shown to be not taught by the combination of Esmay and Bigelow, and since Ganser does not cure the defects of those references the arguments *supra* related to Claims 17-19 apply to the patentability of Claim 25 as

well. *Supra* it was shown that the combination of Esmay, Ganser and Bigelow did not teach or suggest a two focus adjustment means that are releasably fastenable to either a first or second drive means for Claim 23. Therefore, all the limitation recited in Claim 25 have not been taught or suggested by the combination of Esmay, Ganser and Bigelow and Claim 25 recites allowable subject matter.

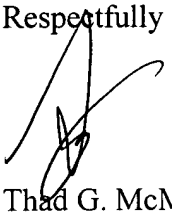
Claim 29 and 31

The arguments regarding the patentability of Claim 22 and 23 *supra* are relied on for the patentability of Claims 29 and 31, but are not repeated. Claim 22 was argued to be patentable over the combination of Esmay and Ganser, and Claim 29 and 31 are patentable over the combination of Ganser, Esmay and Bigelow for the same reasons. Bigelow offers no teaching that would cure the defects of the combination of Esmay and Ganser. Furthermore, the arguments for the patentability of Claim 23 further emphasize the lack of teaching from the combination of Esmay, Ganser and Bigelow for the limitations of Claims 29 and 31. For all the reason above, Claims 29 and 31 recite allowable subject matter and the rejection of those claims should be withdrawn.

Conclusion

Applicants respectfully submit that the present application is in condition for allowance, which action is courteously requested. The Examiner is invited and encouraged to contact the undersigned agent of record if such contact will facilitate an efficient examination and allowance of the application.

Respectfully submitted,



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